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Author:

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Company (Cardiff, Tenn.)

Title:

Cardiff, Tennessee

Place:

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Date:

1890

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MASTER NEGATIVE #

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Cardiff coal and iron company, Cardiff, Tenn.,
Cardiff, Tennessee; its attractions for in-
vestment, immigration, and the establishment of
industries. Addressed to mechanics, tradesmen,
manufacturers and capitalists seeking new fields
for profitable labor, enterprise and investment.
1890,
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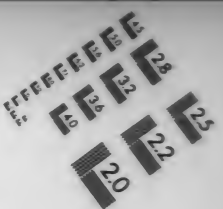
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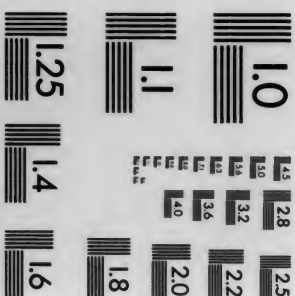
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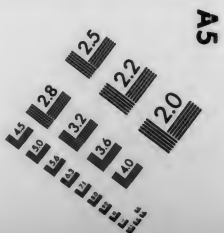
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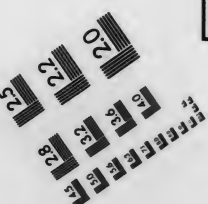
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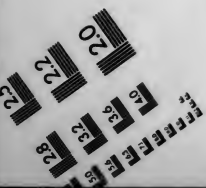
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CARDIFF COAL AND IRON COMPANY.


CARDIFF, TENNESSEE. JULY 1890.

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School of Business

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CARDIFF,

TENNESSEE.

Its Attractions for Investment,
Immigration, and the
Establishment of
Industries.

Addressed to Mechanics, Tradesmen, Manufac-
turers and Capitalists seeking New Fields
for Profitable Labor, Enterprise
and Investment.

Business

D997.9

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JUN 24 1944 PCR

CARDIFF COAL AND IRON COMPANY,

CARDIFF, TENNESSEE.

JULY, 1890.

The CARDIFF COAL AND IRON COMPANY asks your attention to the advantages of its property for the immigration of manufacturers, mechanics and tradesmen, and their families; for the establishment of new industries and the transfer of old ones; and for investment in land and stock. It believes that its lands in Roane, Cumberland and Morgan Counties, Tennessee, afford unexcelled opportunities of prosperity to tradesmen, laborers and manufacturers of almost all kinds, seeking new fields of employment and enterprise in a section of the country which is growing in population and wealth more rapidly than any other.

The Company's charter, granted by the State of Tennessee, sets forth the purposes of the incorporation as follows:

"The encouragement of immigration, the locating, establishing and building of towns and cities, the purchase, improvement, development and sale of property, and the establishment and encouragement of industries, are the objects for which this charter is granted."

The by-laws expressly confer the following powers, among others, to the President and Directors, for the promotion of immigration and industries :

"They may sell and cause to be conveyed any and all the lands and real estate of the Company to such corporation, person or persons, in fee simple, or for any less estate, on such terms and conditions, for such prices or considerations, by public vendue or private sale, as they from time to time shall deem expedient and most for the interest of the Company, and shall cause suitable conveyances to be made thereof. They may demise any of the real estate or personal property of the Company as they may deem expedient, at such rents and on such terms as they may think proper, and cause suitable leases to be made thereof. They may, in the name and behalf of the Company, subscribe for and take and hold, and at their discretion sell and otherwise dispose of, stock and bonds in other corporations which may be organized for the development of the Company's properties, such as water works, gas or electric lighting, hotels, street railroads, iron furnaces, rolling mills, brick works, tanneries and divers manufacturing or mining companies. They shall declare all dividends, allow accounts, supervise the conduct of the various officers, agents and their subordinates. They shall cause such streets, ways, parks and passages to be made and maintained on the Company's lands as they may deem needful, and give and convey in fee simple, or by lease for term of years, or otherwise, such portions of said lands as they may deem expedient for the interests of the Company, to public or private uses, to promote the development of the Company's property and further its interests."

The capital stock of the Company is \$5,000,000, in shares each of \$100 par value.

The following are the Company's officers :

President. — B. B. SMALLEY, Burlington, Vermont.

Vice-Presidents. — W. P. RICE, Fort Payne, Alabama; HENRY C. YOUNG, Cardiff, Tennessee.

Directors. — The PRESIDENT and Vice-PRESIDENTS, Ex-Officio; JOSHUA L. CHAMBERLAIN, New York City, N. Y.; WILLIAM WARNER,

Kansas City, Missouri; SAMUEL E. PINGREE, Hartford, Vermont; CHARLES L. JAMES, Boston, Massachusetts; T. G. MONTAGUE, Chattanooga, Tennessee; ROBERT PRITCHARD, Chattanooga, Tennessee; J. F. TARWATER, Rockwood, Tennessee; J. M. FORD, Kansas City, Missouri; CARLOS HEARD, Biddeford, Maine; JOHN M. WHIPPLE, Claremont, New Hampshire.

Treasurer. — CHARLES L. JAMES.

Assistant Treasurer. — R. L. CALLAHAN.

Fiscal Agents in the North. — CORDLEY & Co., Bankers, 121 Devonshire Street, Boston, Mass.

Bankers in the South. — FIRST NATIONAL BANK OF CHATTANOOGA, TENNESSEE.

Transfer Agents. — AMERICAN LOAN AND TRUST COMPANY, Boston, Mass.

General Manager at Cardiff. — M. M. DUNCAN.

In this list of officers, it is confidently believed, there is a combination of ability and energy, and of experience in similar undertakings, which assures a successful management to the Company. The subordinate agents and employees at Cardiff have been selected with a like careful regard for experience and competency.

SITUATION OF THE TOWN.

The town of Cardiff is situated in Roane County, in the heart of the great Alleghany mineral belt, seventy-five miles north of Chattanooga, and about as far south of the Blue Grass region, of which Lexington, Kentucky, one hundred and forty miles north of Cardiff, is the metropolis. The choice of the site was influenced in the first place by the fact that within this stretch of a hundred and fifty miles between the Blue Grass region and Chattanooga some important centre of industry and population is bound soon to be developed by the progress of the country. After thorough surveys of the

whole line the particular locality of Cardiff was chosen as surer than any other to secure to its settlers the advantages and profits of such a development.

THE LAY OF THE LAND.

1. Because of the lay of the land. The town site is a parallelogram comprising some three thousand acres, a segment of a beautiful and fertile valley bounded west by Walden's Ridge, and east by hills which separate it from the lowland of the Tennessee River. It slopes gently down from these dividing hills on one side, and from the foot hills of the Ridge on the other side, forming in the centre a level inviting railroad transit; the trend of the valley is nearly northeast and southwest. Height of this level (which is the lowest part of the town site) eight hundred feet above sea level. Height of Walden's Ridge, 1,700 feet. This valley land has all been cleared and well tilled for more than a hundred years, and dates its settlement back to the beginning of the State. The titles come from grants for services in the Revolutionary War. As one travels southward from the Blue Grass region, this rich valley is the first that is suitable for the site of a town which may reasonably hope to attain the growth of such cities as Chattanooga and Birmingham. There are situations on the way which are adapted for hamlets and villages, but, until Cardiff is reached, none that is clearly destined by nature for a great aggregation of industries and people.

Back from Walden's Ridge the Company has acquired conveyances of vast tracts of mineral, agricultural and timber lands, in which for more than a year it has been pursuing careful topographical and geological surveys, as well as clearing up titles of portions of it which are

in dispute by reason of interfering grants, or grants imperfectly located originally, and of squatters' claims, and other sources of conflict. The topographical survey remains under the direction of Mr. Otto Sonne. The geological survey has been directed by Prof. A. C. Gill. The Company's legal counsel include Messrs. Wheeler & Marshall and Pritchard, Sizer & Thomas, of Chattanooga, Warner, Dean & Hagerman, of Kansas City, Owens & McElwee, of Rockwood, and Wright & Wright, of Wartburg. In the Company's prospectus, issued in March, 1890, the President and Directors, desirous of avoiding by any possibility an overstatement, set forth moderately that "the Company's acquisitions, approved by these legal authorities as of absolutely good and indefeasible title, exceed fifty thousand acres, or more than seventy square miles." It becomes proper now to add that the Company's deeds include within their terms more than one hundred and fifty thousand acres, and that in the progress of the legal investigations and of the topographical surveys strong hopes are warranted of a successful maintenance of title to very much more than the fifty thousand acres then asserted; and also that their mineral riches are amply confirmed at every step of the survey.

On the annexed map A the platting of the town site is fully delineated. Tennessee and Massachusetts Avenues are fixed in the design, and confirmed by the lot purchases and by block buildings, as the principal business streets. The favorite sites for dwellings are on the back streets from those avenues, and also on the east side of the township, where the platting is specially adapted for the purpose. Many spacious and some quite costly houses have been built in both localities. The blocks on the lower level of the valley, in the vicinity of railroad tracks, are more particularly adapted to manufacturing uses, and have been platted with that design.

The map B shows the tracts of land back of the Ridge within the terms of the Company's deeds, the streams by which they are traversed, and (in red lines) the routes of the highways and county roads by which they are now accessible. The following is a recent brief description of them by a reporter who conducted a special investigation of their facilities for settlement and development:—

"The boundary line of the Cardiff Company's mountain property included within the terms of its deeds, and comprising both the titles which have been perfectly cleared up and those which are in process of adjustment, is rectangular in form, the eastern line of the rectangle being the most irregular. The southern boundary is about eighteen miles in length, reaching from near Emory Gap Station to Daddy's Creek, on the west of Crab Orchard Mountains. The eastern boundary stretches from near Post Oak, in an irregular line, the mean direction being east by north, to the Emory River, above Oakdale Junction. The northern boundary reaches from the Emory River out on the Cumberland Plateau to the west of the Crab Orchard Mountains. The western boundary reaches from Crab Orchard Gap north about eight miles. These boundaries, therefore, enclose a territory eighteen miles long and eight miles wide. This land embraces the whole of Clifty Creek Basin, the whole of Crab Orchard Creek Basin, the head-waters of Piney, Mammy and Fall Creeks, the whole of Yellow Creek and a goodly share of Daddy's Creek. The main road from Rockwood to Wartburg, known as the Brown's Gap road, on the divide between Clifty and Crab Orchard Creeks, the Antioch road over the mountain to Crossville, the Rich Gap Road to Crossville and the Millstone Gap road to Crossville, all cross the Cardiff Co.'s mountain territory, passing through the Crab Orchard mountains. The southwest corner of the Company's land is cut by the old Nashville and Knoxville stage road through Crab Orchard Gap. The Cardiff mountain lands are in Morgan and Cumberland Counties, while the town site is in Roane County. The Company's mountain headquarters are located in the southeastern part of the mountain land, four miles north of Walden's Ridge, and five miles west from Cardiff. From these headquarters westward the road runs over a series of sandstone formations and down into the fertile bottoms of the creeks, which have worn deep channels in the plateau. These creeks and their tributaries are of pure and quick water, furnishing admirable drainage and an inexhaustible pure water

supply for domestic and stock purposes. It is a soft, freestone water, the streams rising in springs, a never-failing source. One can hardly proceed a quarter of a mile in any direction on the plateau without crossing one of these creeks. The soil of the plateau is light and sandy, well adapted for gardening and fruit raising, with luxuriant grass for stock. The scenery all through this section is very beautiful. The land is undulating, the ridges being crowned with a luxuriant forest growth, with here and there an abrupt rocky wall or sharp peak projecting."

TRANSPORTATION FACILITIES.

2. Because of transportation facilities. The town site is traversed from north to south by the Cincinnati Southern railroad, part of the Queen & Crescent railroad system, which is the main route from Cincinnati to New Orleans. The managers of this great railroad system are interested next to the Cardiff Company itself to promote the development of Cardiff for their own traffic. The passenger station and the freight yards are admirably commodious. Every desirable facility is afforded on the most liberal scale for transportation and storage, and rates both north and south are adjusted to the advantage of the business of the town. At a short distance northward, communication is effected with the East Tenn., Va. & Ga. railroad system. In the west several lines are advancing from Central Tennessee to connection with these roads, and to effect it must pass through the Cardiff Company's lands back of the Ridge, and open them to easy access. Water transportation by the Tennessee River is also available. The town site is watered by the branches of Caney's Creek, which after their junction flow down to the Tennessee River on an easy grade, capable of being paralleled by rail at very moderate expense. Thus (without any outlay by the

Cardiff Company unless for future communication with the river) the town is in complete and easy communication with all quarters of the country, by long established main ways of commerce. There is no part of the United States from which freight cannot promptly and regularly be transported to and from Cardiff without breaking bulk after once lading on the cars.

The annexed map A shows the course of the Queen & Crescent Railroad line throughout the town, and the location of the passenger station and the freight yards. Map B shows the railroad relations toward Chattanooga southward and toward Lexington and Cincinnati northward, and also the branch of the East Tennessee, Virginia & Georgia line, communicating eastward with Knoxville. This map exhibits also the vast lands of the Company beyond Walden's Ridge, which must be traversed by any of the railroads that are building eastward from Central Tennessee in order to reach a junction with the Queen & Crescent and the E. T., Va. & Ga. lines and the Tennessee River. Map C is a vertical section of these lands, and shows the gaps in them available for railroad communication. The course of Caney's Creek is also drawn in Map B, showing the route of direct communication with the Tennessee River from Cardiff. The narrow gauge road from the Rockwood mines and furnaces to the River is indicated on the same map.

MINERAL WEALTH.

3. Because of mineral wealth. A vein of rich red fossil or Clinton iron ore runs in the foot hills of the Ridge throughout the whole length of the town site, and the Ridge above is seamed with several veins of excellent coal. Over the Ridge the Company owns vast tracts of land full also of iron ore and coal. The titles of more than fifty thousand acres are clear and indefeasible. The titles of areas even greater are in process of adjustment. These land titles proceed originally from the State of Tennessee. Both the town site and

the back lands contain also abundance of limestone and brick clay. Whenever any of the railroads now pushing eastward from Central Tennessee reaches the Company's back lands, the ore beds and coal measures there will become as accessible and marketable as those along Walden's Ridge now are. The quality of the coal and iron is not experimental, but has been proved by profitable working for more than twenty years. The coal that has long been profitably coked for the Roane Iron Company's blast furnaces at Rockwood is mined from the same veins in Walden's Ridge. The iron ore for those furnaces (as well as for others at Dayton and elsewhere) is supplied from the Cardiff Company's mines. Two groups of the iron mines near the north end of the town site have been worked for many years. They are connected by branches with the Cincinnati Southern railroad, which furnishes a special ore train for their accommodation. Twenty car loads are now shipped daily from these mines, yielding a net profit of more than \$30,000 per year, and work is under way to triple the quantity, and increase the proceeds proportionately, by enlarging the present openings and making new ones. Plans also are made for a blast furnace of the most approved modern pattern on the Company's own lands, and ground was broken for it on June 26. The ore vein is within seven hundred yards from its location, and the limestone beds within one hundred yards. A broad gauge railroad, double track, connects it with the mines. All the coal and iron works are under direction of Mr. M. M. Duncan, General Manager, who for the last eight years has been Superintendent of the Roane Iron Company's mines, coke ovens and blast furnaces. The geological survey instituted and still prose-

cuted by the Company reports the following mineral deposits as thus far ascertained, and others yet to be investigated: Coking, steam, smithing, gas and domestic coals; hematite, limonite (brown hematite) and carbonate iron ores; limestone and marble; freestone and conglomerate; fire-clay, brick-clay, pipe-clay, etc.; zinc blende and calamine; lead sulphide or galena; alum, glauberite and green vitriol.

The town site Map A, exhibits the iron mines now worked by the Company, and their track communication with the Cincinnati Southern (Queen & Crescent) main line of railroad. In the vicinity of each group of mines are villages (owned by the Company) for the accommodation of the miners and their families, and commissary stores for their supplies. These mines may be multiplied manifold, as the ore vein runs through the foot hills the whole length of the township with an average thickness of more than four feet. Parallel with this vein, and less than a quarter of a mile northwestward is an extensive limestone deposit, and within a further distance of half a mile are three veins of coal. The same map exhibits the Company's furnace site, and the construction of the furnace has begun under the care and supervision of Mr. Duncan. Coal for its use will be mined from the Company's coal measures in Walden's Ridge, and coked on levels from which it can be delivered at the furnaces by gravity power if desirable. The iron ore will be delivered likewise at the furnace by gravity power. Map C exhibits the coal measures in the Ridge directly above the town site, and the juxtaposition of the iron ores and limestone for flux. In like manner coal supplies at the minimum of cost will be distributed to manufacturing establishments of every variety in the town.

The map C exhibits a vertical section of the Company's back lands, and the coal and iron veins which traverse them, and the position of these mineral lands in their relation to the valley in which the town is situated. With regard to the iron ores and coal measures, the geological survey reports as follows:

IRON. — "The mines give an excellent opportunity of estimating the quantity of ore. The size of the veins is very regular, averaging

in Cardiff from four to four and a half feet, and on the Riley's Creek property, eight miles distant, fully six feet. There is enough iron ore within ten miles of the town to supply ten one-hundred ton furnaces for a hundred years. Besides the vast deposits of red fossil ore, there are undeveloped deposits of brown hematite within two or three miles of the town. This may prove very valuable for mixture with the 'harder' portions of the Clinton ore. The carbonate ores have not been found in large quantities."

COAL. — "The escarpment of Walden's Ridge forms the southeastern boundary of the productive coal-measures. Between it and the seaboard of Georgia and the Carolinas there is no coal. Though the Ridge rises only eight or nine hundred feet above the valley, yet the position of the strata is such that about 1400 feet of coal-measure rock is exposed. Eight distinct coal-beds have been recognized. Four of these are of workable thickness for considerable areas. Test openings on such beds as may be easily reached from the surface show these results: Bird's Branch bed, twenty-two inches and sixteen inches, three miles apart; Haley Grove (sub-conglomerate) three feet six inches, thirty-four inches of coal, rest slate; Sewanee now seven feet at end of our tunnel.

"The Sewanee is noted as the most trustworthy coal-bed of Tennessee. Its coke is used successfully by the Roane Iron Company. It is also a good smithing and domestic coal. The Haley Grove bed is in two layers, with a parting of slate between. This is an excellent smithing and coking coal. The Aetna vein has not yet been opened, though borings to the northward find it nearly five feet thick, and to the south-west it is more than six and a half feet in thickness. The Bird's Branch vein is of about the same size. It is reported three and a half feet in places.

"The quantity of the coal is inexhaustible. If we consider that three of the eight beds in the coal land belonging to the Cardiff Co. are workable over large areas, we have, at the lowest estimate, twenty thousand tons per acre. Two thousand acres would supply four one hundred-ton blast furnaces for a hundred years. In brief, the amount of coal on the Cardiff property is for all practical purposes unlimited."

TIMBER.

4. The Company's lands back of Walden's Ridge, of which, as has been mentioned, more than seventy square miles are held by clear and indefeasible title, are well timbered with both hard and soft woods, specimens of which are to be examined in the Company's exhibition building in the town. Among the varieties of wood are pine, hickory, poplar (white wood), holly, sweet gum and black gum, cherry, birch, maple, beech, basswood, black walnut, chestnut, and six varieties of oak. The following extract from a report of Mr. C. H. Young describes their quantity and quality and adaptiveness for manufacture:

"Not having been heretofore accessible to transportation, the Cardiff Company's great tracts of mineral lands beyond Walden's Ridge have not been lumbered to any extent, and a greater part of them remains an unbroken forest, as it was when the first settler came to the country in the latter part of the last century. Fires have done some damage in stunting the growth of a certain amount, but the quality is good, and there is a supply and variety sufficient for all kinds of work.

"The pines occupy a prominent place, being well distributed over the land. The yellow pine (short leaved), suitable for all kinds of framing and heavy timber work, is of even quality and good size, many trees scaling one thousand feet to the tree, and holding their size nearly to the top. This pine is easily lumbered, being mostly on level land or gentle slopes. The white pine is not wholly first-class, but is very good and of large size, and is an important part of the timber product, supplying as it does to this section a need for which no other timber is suitable. It is all in the creek bottoms and not so cheaply lumbered, but pays well for all expense when manufactured. There are several millions of this, most of it very accessible. Much of this pine would have been better could it have been used years ago.

"The oaks form a large share of the product, there being six varieties. The white oak is very sound and large, especially adapted

to carriage work and car building, also making a fine finish when properly worked. Black oak is more brash and better for lighter work in furniture, having a fine grain when finished. Red oak also will work into furniture and car work, having a tint when finished almost like cherry. Spanish oak is of uniform soundness, and a very fine timber for both heavy and light work. It is almost inexhaustible, and attains a large size, many trees measuring three feet in diameter, and thirty feet to the limbs. Post oak is very tough, and will work where white oak is suitable. It has a peculiar spot in the grain that makes it a beautiful finish stock. Chestnut oak is especially valuable, the bark being used for tanning. It is more open grained than other oak, but makes a good furniture timber. The oak in this country alone will be sufficient to supply car furniture and carriage works for years, and it is doubtful if it can ever be used as fast as it grows. It can be obtained at very low cost, and is well distributed on good even land to lumber. There are millions of feet of it for ties alone.

"The chestnut is very abundant and valuable for ties, telegraph poles and inside work, also for posts and fence rails.

"Next comes hickory, for all kinds of bent work in wagons and agricultural machinery, and the supply and quality is sufficient to support a large manufactory of this class in Cardiff for a century. This would be an industry that could be made profitable to an enterprising party at once, in the use of this timber alone. It is inexhaustible. Red hickory is a fine lumber for house finishing.

"White wood, or as it is called here, poplar, is of good quality and very large. It is abundant, and has a yellow cast that makes it especially desirable for inside work. It is easily worked into lumber at small cost, which gives it a value as one of the factors in the timber development.

"Holly is plenty, and attains a good size to make desirable stock for market. The streams are lined with it for many miles.

"Black walnut is natural to the limestone in the valley about Cardiff, and can be obtained very cheaply, although much of the best has been used in years past. There are sections, however, round about, that have never been cut off.

"Both sweet gum and black gum abound. The former makes a very fine finish lumber, and can be made valuable.

"Cherry is found in some localities, and can be obtained cheaply.

" Birch and maple are plenty and make fine furniture stock.

" Beech and basswood are plenty in some sections, and are of fine quality.

" These timbers are natural to the plateau, and cover the Cardiff Company's entire property. When the question of transportation is solved, and railroads cross the plateau from west to east, the product of the forests of this great mountain region will play as important a part in the future development of Cardiff as her immense resources of coal and iron, and will aid largely in giving her a variety of industries, thereby increasing her power as a great manufacturing centre."

BUILDING MATERIAL.

5. There is no place in the South where the cost of building is more moderate, by reason of the facility of supplies of material and labor. None of the great cities which have grown up of late years in that part of the country has enjoyed at the start such advantages in this respect. The sources of lumber supply are close in the neighborhood, the hills are full of excellent building stone, and very extensive quarries, lime-kilns and brick-yards are in operation within the town itself. One of the several building firms or companies now at work in Cardiff (July, 1890) has on its pay roll more than three hundred carpenters, masons, brickmakers, lime burners, quarrymen and ordinary laborers.

HEALTH.

6. There is no healthier portion of the United States. The mean annual temperature is very nearly the same as that of Chattanooga, 59.7 degrees Fahrenheit, and enables work in the open air all the year round. The nights are cool and refreshing even at the height of mid-summer. In the large surveying parties of the Company (two groups, topographical and geological) which have

been at work for a year, there has been no case whatever of sickness. The Company's resident physician reports that neither in the town nor at either of the mining villages has there been any epidemical disease during his charge, and that the percentages of ordinary illness are remarkably light. The facilities for drainage are excellent. This is the satisfactory condition of the public health, notwithstanding the extraordinary provocations to a different condition which attend extensive openings of soil for grading and building in every new and fast growing town. Doubtless the long settlement and ancient clearing of the valley (as has been mentioned, it was one of the very first settled places in Tennessee) have promoted these favorable healthful conditions. A large public bath and swimming tank has been established for summer use on one of the branches of Caney Creek. The quality of the upper waters of the creek for drinking is very pure, and there are also very large springs close in the vicinity. The Company's engineer reports the water supply satisfactory for every purpose, both in quantity and in quality, for some years to come, and whenever it is outgrown by the needs of population and of manufactures, the Tennessee or Emory Rivers can easily be reached for an absolutely inexhaustible supply by piping.

MODERATE COST OF LIVING.

7. The fertile valley lands and the farms on the upland plateau yield abundant products for the table. The railroads add to these the provision markets of great cities within such a moderate distance that the cost of supplies is not largely enhanced by the charges of transportation. The climate enables economy in clothing and domestic

fuel, and the latter for the most extensive use is both cheap and plentiful.

GOOD-WILL.

8. The good-will of all the native population of the region is an element of success not to be underrated in importance. The following paragraph of the Company's prospectus of March, 1890, remains strictly true, and has been confirmed at every step of the progress of settlement and industries:

"By rigid instruction to all its agents the Company has exercised such scrupulous fairness in all its transactions, and exhibited such abundant pecuniary resources for every need, that it has attracted the good-will of everybody concerned, and has entirely escaped a class of dangers from local prejudice and animosity, on which Southern undertakings sometimes have been wrecked. Southern as actively as Northern and Western people are interested in and in behalf of the Company's enterprise, and it is safe to say that it has no more cordial well-wishers than the old inhabitants of the region in which it is prosecuted."

THE GROWTH OF THE TOWN.

The considerations thus enumerated were among those which induced the choice of the site of Cardiff; and progress in its development has approved the selection. The first sale of the Company's town lands was held in April, 1890, and is well known by the published reports in all sections of the country as the most extensive and profitable land sale ever held in the United States. During the short interval since that sale, there has been a steady influx of population and progressive rapidity in building. Almost all the trades necessary for the comfort of a well organized town are now represented at Cardiff, but there is room and opportunity for

more, to keep pace with the growth of the place. All the usual building industries (lumber yards, planing mills, brick yards, lime kilns, etc., etc.), are well represented; the town is excellently lighted with an electric system (arc lights for public illumination, and incandescent lamps for domestic use); a dummy line of railway is graded for several miles down the valley, and preparations are making for a similar line northward; the foundations for a large hotel, of the first class by comparison with the best in the country, are finished, and contracts are making for the whole structure to be pushed to speedy completion; a national bank and a State bank and trust company are chartered and organized; brick blocks are going up for business, and frame buildings of every variety both for business and for residence; a Commercial Club or Board of Trade has been organized and is preparing elegant and commodious quarters for itself; the Exhibition Building, a large and handsome wooden structure, accommodates the offices of the Company (while a brick and stone block is going up for their occupation jointly with the First National Bank) and also furnishes room for public and social meetings; the railroad station is beautiful as well as commodious, and the grounds around it are laid out as a park; the grading of the principal business avenues is finished; the iron-mining villages are being improved; surveys are making for branch railroads to coal mines; a broad highway is opened along the eastern hills; and a well conducted newspaper, the *Cardiff Herald*, is established, with a completely equipped job printing office and steam presses.

Even without the great mineral resources which specially assure the prosperity of Cardiff, it is very worthy

of examination by people from other sections of the country who have any disposition to identify themselves with new places sure of rapid growth from their locality as distributing centres of districts increasing in wealth and population. Its distance from New England and the Middle States is much less than that of the regions of the Far West which have been developed into prosperity by immigration from the East. Its climate is milder, and certainly as healthful. Its natural surroundings are far more beautiful. The native population is hospitable. These inducements of themselves are sufficiently attractive for immigration to Cardiff from old sections whose fertility is exhausted and whose business is on the wane. Here are new fields sure to reward energy and enterprise and honesty, with wealth and influence and respect.

But when to these are added the mineral resources of the place, and the countless purposes of profitable industry to which they can be turned, the attractions are doubled. The quantity of iron ore in the Company's possessions in and near the town is estimated by mining experts (as has been already quoted) as sufficient "to supply ten 100-ton furnaces for a hundred years." The quantity now mined (July, 1890) from openings in the veins at the north end of the township, for the supply of Rockwood and Dayton furnaces, is twenty car-loads per day, and preparations are making for speedily tripling this amount. The measures in Walden's Ridge and the Company's possessions back of the Ridge are, in the words of the mineral experts, "for all practical purposes unlimited" in the quantity of coal they can furnish, and the qualities of the coal are proved by profitable experience to be excellent for coking, for steam power, and for

domestic use. The cost of making iron per ton at Cardiff is estimated by the Company's experts as follows, the estimates being based, when possible, on the actual cost of operations now in progress on the grounds:

1½ tons coke at \$1.50	\$2.62½
2½ " ore " .70	1.92½
½ ton limestone .3015
Labor and incidentals	3.25
Total,	\$7.95

In case it is ever deemed advisable to work ore belonging to other parties, an additional expense of 55 to 68½ cents per ton will be incurred, raising the total to \$8.63½ at a maximum.

WITH WHOM TO COMMUNICATE.

Persons considering immigration to Cardiff, or engagement in trade or the establishment of industries there, or investment in the Company's lands, may address correspondence directly to the CARDIFF COAL AND IRON COMPANY, Cardiff, Tennessee. We recommend, however, personal visits and inquiries on the spot. Mr. M. M. Duncan, the General Manager of the Company at Cardiff, Mr. H. C. Young, the resident Vice-President, and Mr. R. L. Callahan, the Assistant Treasurer, will always be pleased to furnish full information in response to such personal inquiries. The President and Treasurer of the Company also may be consulted at its offices, at No. 4 Liberty Square, Boston, Mass.; and Mr. Rice, the First Vice-President, at the office of W. P. Rice & Co., No. 15 State Street, Boston, Mass. The banking house of Messrs. Cordley & Co., the fiscal agents

of the Company in the North, is at 121 Devonshire Street, Boston, Mass., where all the publications of the Company may be consulted, and information concerning its stock may be obtained.

HOW TO REACH CARDIFF.

BOSTON TO CARDIFF.

Fitchburg R.R. to Rotterdam,	Bee Line to Cincinnati,
West Shore to Buffalo,	Cin. So. (Queen & Crescent Route)
Lake Shore to Cleveland,	to Cardiff.

Boston & Albany R.R. to Albany,	Bee Line to Cincinnati,
New York Central to Buffalo,	Cin. So. (Q. & C. Route) to Car-
Lake Shore to Cleveland,	diff.

Merchants' & Miners' Trans. Co. Stmr to Norfolk,	E. Tenn., Va. & Ga. (via Knoxville) to Keathley,
Norfolk & Western to Bristol,	Cin. So. (Q. & C. Route) to Cardiff.

Shore Line R.R., or any Steamboat Line, to New York,	Norfolk & Western to Bristol,
Penn. R.R. to Hagerstown,	E. Tenn., Va. & Ga. (via Knoxville) to Keathley,
Shenandoah Val. to Roanoke,	Cin. So. (Q. & C. Route) to Cardiff.

New York & New England R.R. to New York,	Norfolk & Western to Bristol,
Penn. R.R. to Hagerstown,	E. Tenn., Va. & Ga. (via Knoxville) to Keathley,
Shenandoah Val. to Roanoke,	Cin. So. (Q. & C. Route) to Cardiff.

Fitchburg R.R. to Troy,	New York, Lake Erie & Western
Del. & Hudson to Binghamton,	and connections to Cincinnati,
	Cin. So. (Q. & C. Route) to Cardiff.

Boston & Maine R.R. and connections, to Philadelphia,	Norfolk & Western to Bristol,
Baltimore & Ohio, via Washington, to Shenandoah Jc.,	E. Tenn., Va. & Ga. (via Knoxville) to Keathley,
Shenandoah Valley to Roanoke,	Cin. So. (Q. & C. Route) to Cardiff.

NEW YORK TO CARDIFF.

New York Central R.R. to Buffalo,	Bee Line to Cincinnati,
Lake Shore to Cleveland,	Cin. So. (Q. & C. Route) to Cardiff.

Penn. R.R. to Hagerstown,	E. Tenn., Va. & Ga. (via Knoxville) to Keathley,
Shenandoah Val. to Roanoke,	
Norfolk & Western to Bristol,	Cin. So. (Q. & C. Route) to Cardiff.

Balt. & Ohio R.R. to Cincinnati,	Cin. So. (Q. & C. Route) to Cardiff.
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PHILADELPHIA TO CARDIFF.

Balt. & Ohio R.R. to Cincinnati,	Cin. So. (Q. & C. Route) to Cardiff.
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Balt. & Ohio R.R. to Shenandoah Jc.	E. Tenn., Va. & Ga. (via Knoxville) to Keathley,
Shenandoah Val. to Roanoke,	Cin. So. (Q. & C. Route) to Cardiff.
Norfolk & Western to Bristol,	

Penn. R.R. to Pittsburg,	Cin. So. (Q. & C. Route) to Cardiff.
Penn. Lines to Cincinnati,	

BALTIMORE AND WASHINGTON TO CARDIFF.

Baltimore & Ohio R.R. to Shenandoah Jc.	E. Tenn., Va. & Ga. (via Knoxville) to Keathley,
Shenandoah Val. to Roanoke,	Cin. So. (Q. & C. Route) to Cardiff.
Norfolk & Western to Bristol,	

CHICAGO TO CARDIFF.

"Big Four" to Cincinnati,	Cin. So. (Q. & C. Route) to Cardiff.
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KANSAS CITY AND ST. LOUIS TO CARDIFF.

Any Line to St. Louis,	Cin. So. (Q. & C. Route) to Cardiff.
Ohio & Miss. R.R. to Cincinnati,	

K. C., Ft. Scott & M. to Memphis,	Cin. So. (Q. & C. Route) to Cardiff.
Memphis & C. to Chattanooga,	

DENISON, TEXAS, TO CARDIFF.

M. K. & T. R.R. to Sedalia,	Ohio & Miss. to Cincinnati,
Mo. Pac. to St. Louis,	Cin. So. (Q. & C. Route) to Cardiff.

M. K. & T. R.R. to Bells,	Memphis & C. to Chattanooga,
Mo. Pac. to Memphis,	Cin. So. (Q. & C. Route) to Cardiff.

M. K. & T. R.R. to Mineola,	Q. & C. Route to Cardiff.
T. & P. to Shreveport,	

NEW ORLEANS, BIRMINGHAM, FORT PAYNE AND CHATTANOOGA TO CARDIFF.

Queen & Crescent System to Cardiff.

LOUISVILLE TO CARDIFF.

Louisville South. R.R. to Burgin,	Cin. So. (Q. & C. Route) to Cardiff.
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STOCK INVESTMENT.

The capital stock of the CARDIFF COAL AND IRON COMPANY, as has been mentioned, is \$5,000,000, in shares of the par value of \$100. Only a limited amount remains open for public sale, and the subscribers for the greater part are holding for investment with ample pecuniary resources to retain it in confidence of great and steady enhancement of its value.

1. By the growth and development of the town of Cardiff, and disposal of town lands. The Company, in pursuance of its development policy, has already expended at Cardiff several hundred thousand dollars in improvements of the town, and will continue disbursements for that purpose on the same liberal scale from the proceeds of land sales. Each dollar that goes back into the land increases by so much the stock value.

2. By the ultimate opening of the vast tracts of back lands to settlement and improvement, which will be realized when they are pierced by the lines of railroad that are approaching from the west. Their mineral riches will then become as available and marketable as those along Walden's Ridge and in its close vicinity now are, and their timber will find outlet.

3. By the adoption of a judicious dividend policy by the Company as soon as its land sale receipts exceed the treasury fund desirable for steady pursuance of the development policy.

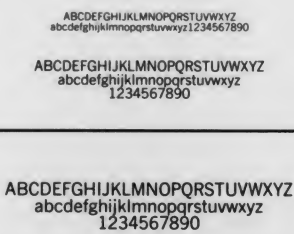
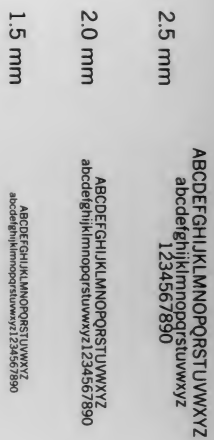
POPULATION.

The official census enumeration, taken scarcely two months after the first sale of town lots was made by the CARDIFF COAL AND IRON COMPANY, reports a population of 1,235, accumulated within that brief time. This does not include non-resident mechanics and laborers (who number at least five hundred more) or the considerable farming population on the Company's lands beyond Walden's Ridge. It is a very remarkable showing, and the whole history of the settlement of the country may be challenged for a parallel. Since the census enumeration the population has been increasing by the daily influx of new immigrants intending permanent residence, and by arrival of families whose fathers, sons and brothers have been preparing homes for their occupation, and deferred bringing them to Cardiff till these should be ready. It is not a "boom," in the sense in which that word is commonly used; but is a steady and well-sustained growth, justifying the expectation of the founders of the town that it is destined for a place of the first rank among the centres of population and industry in the New South.

REDUCTION

RATIO

16:1



1.0 mm
1.5 mm
2.0 mm
2.5 mm



Century

A & P

1303 Geneva Avenue
St. Paul, MN 55119

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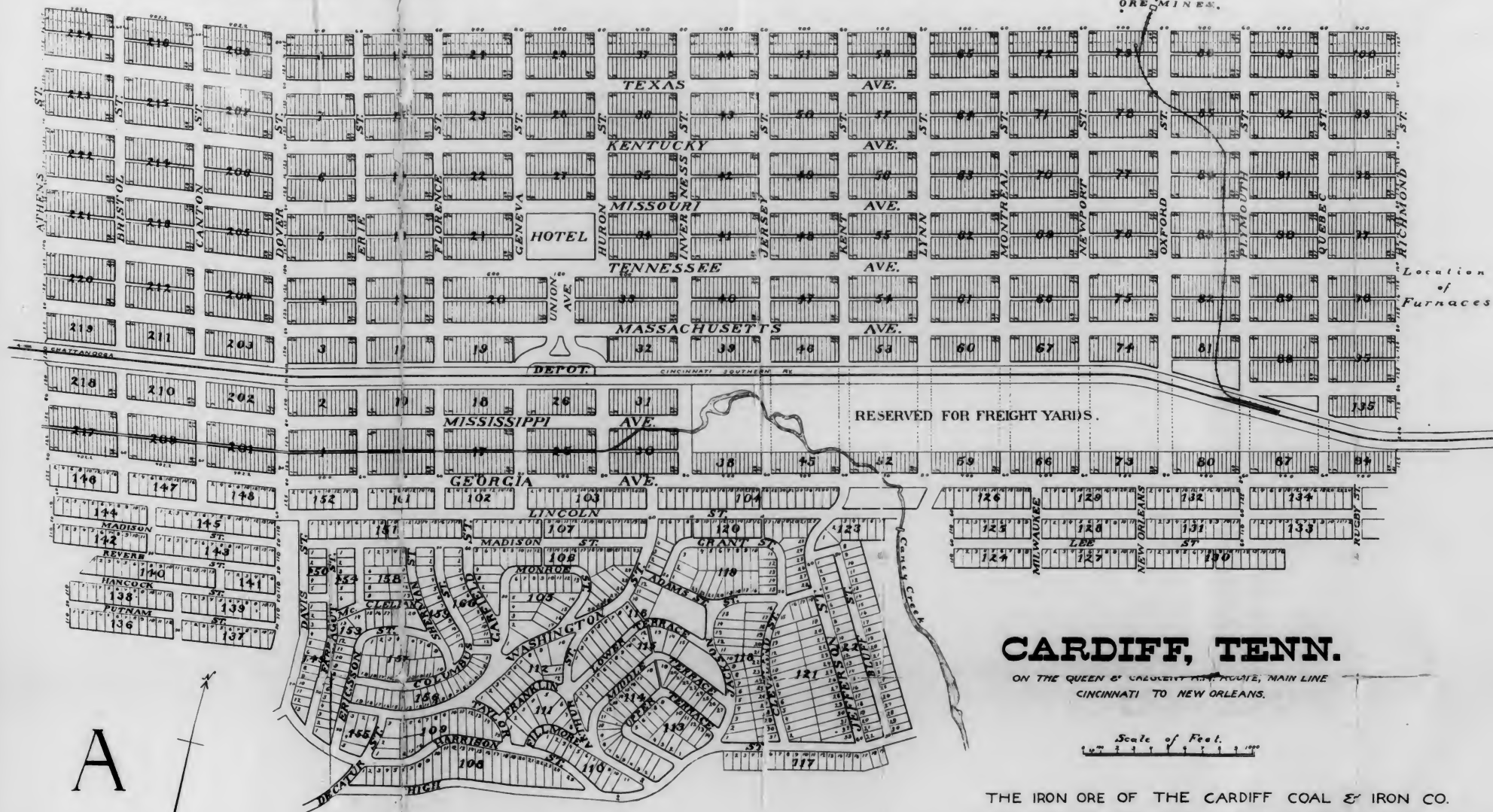
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A3

WALDEN'S RIDGE RISES HERE, BACK OF THE TOWN.

ORE MINES.

ORE MINES



CARDIFF, TENN.

ON THE QUEEN & CINCINNATI R.R. ROUTE, MAIN LINE
CINCINNATI TO NEW ORLEANS.

THE IRON ORE OF THE CARDIFF COAL & IRON CO.
RUNS AT THE FOOT OF WALDEN'S RIDGE, THROUGHOUT
THE WHOLE LENGTH OF THE TOWNSHIP

**REDUCTION
RATIO
12:1**

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2.0 mm

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1.5 mm

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PM-MGP 13"x18" METRIC GENERAL PURPOSE TARGET PHOTOGRAPHIC



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1.5 mm

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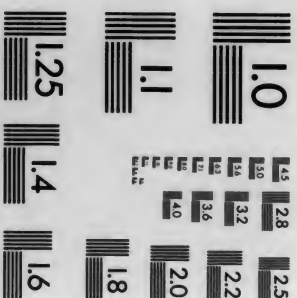
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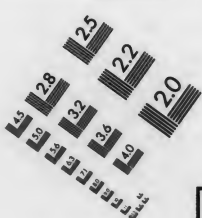
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A5



A4



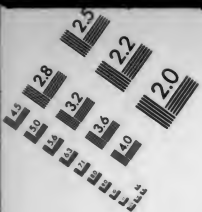
1303 Geneva Avenue
St. Paul, MN 55119

PRECISIONSM RESOLUTION TARGETS

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abcdefghijklmnopqrstuvwxyz
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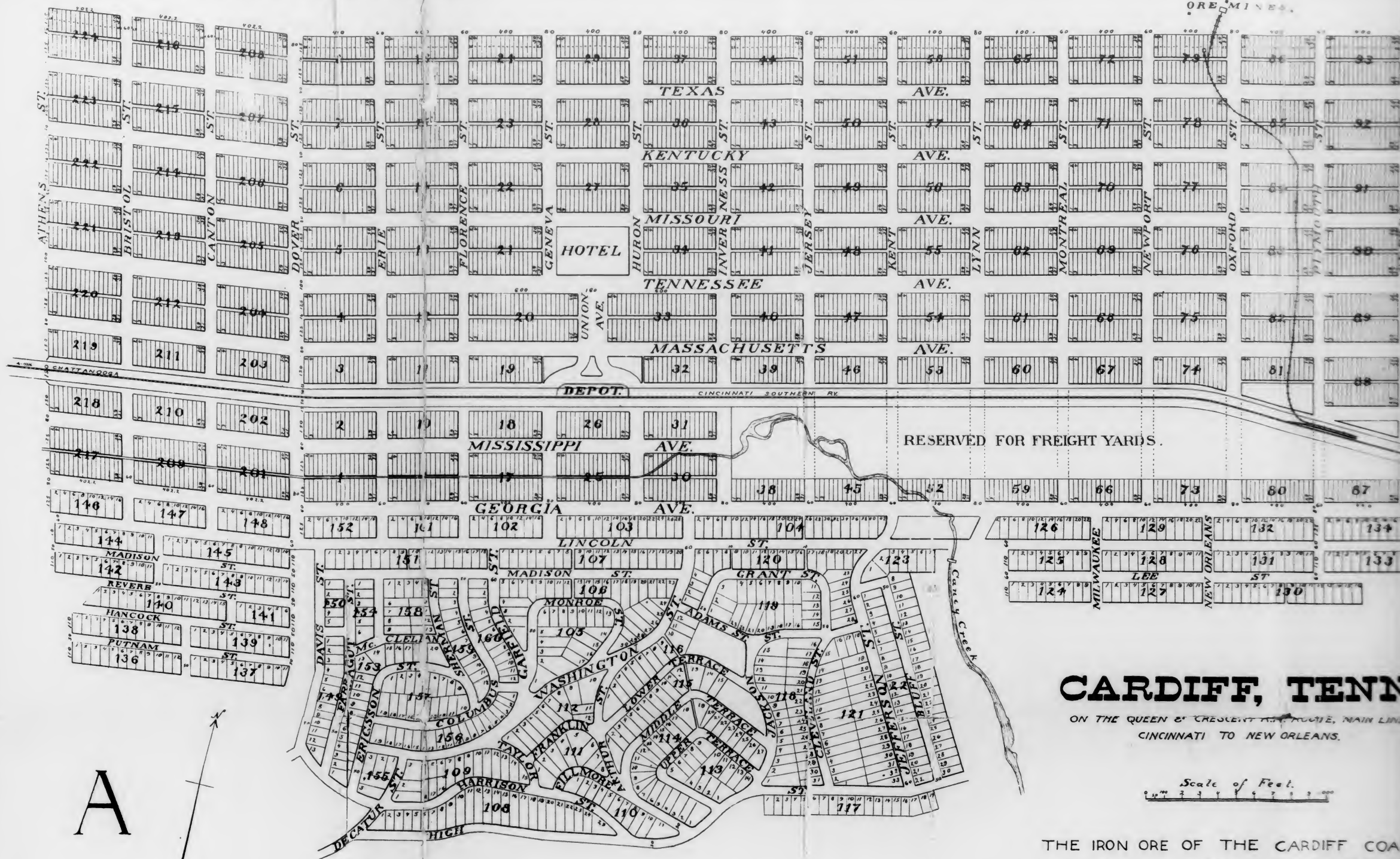
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WALDEN'S RIDGE RISES HERE, BACK OF THE TOWN.

ORE MINE.



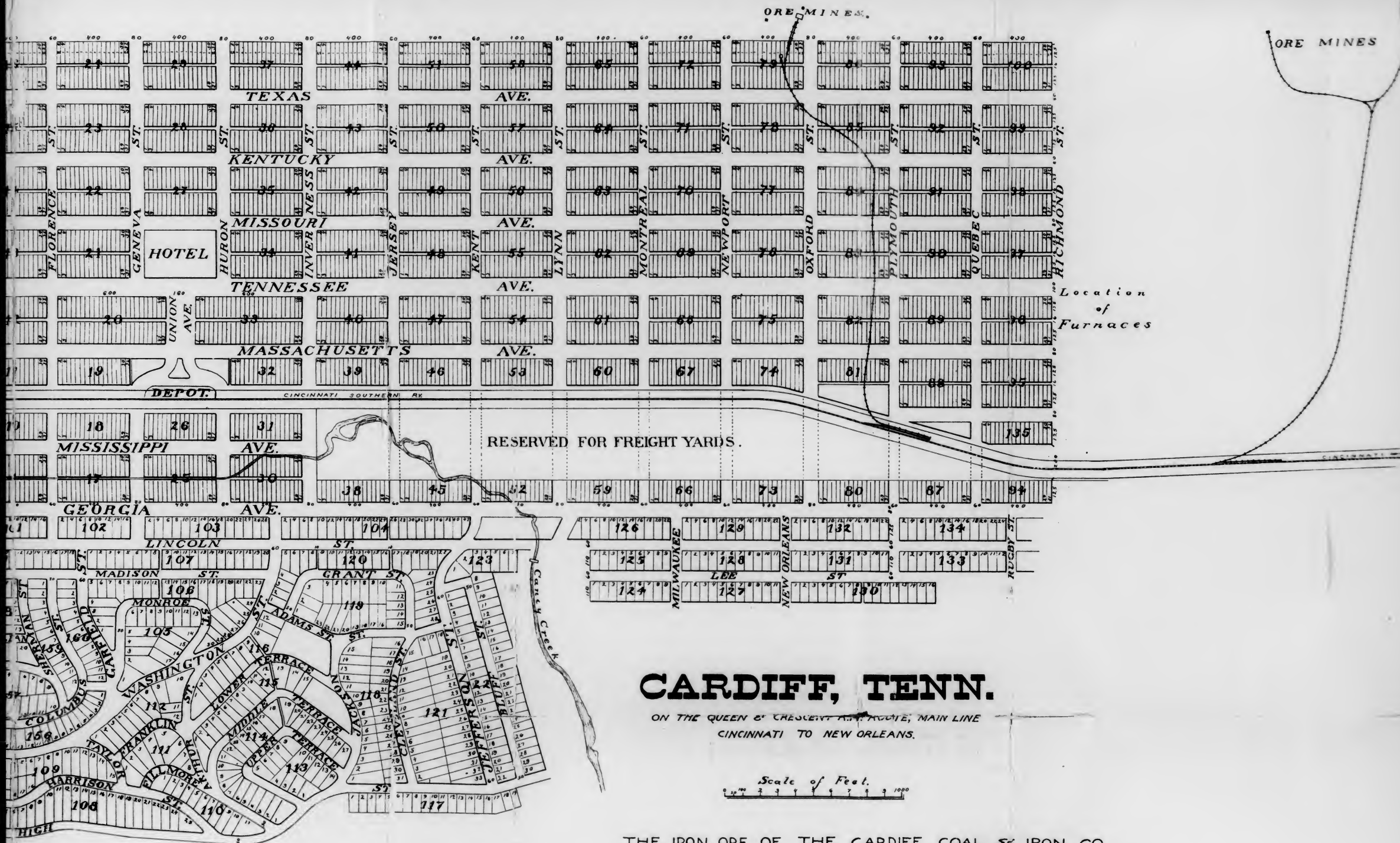
CARDIFF, TENN

ON THE QUEEN & CRESCENT R.R. ROUTE, MAIN LINE
CINCINNATI TO NEW ORLEANS.

Scale of Feet.
0 100 200 300 400 500 600 700 800 900 1000

THE IRON ORE OF THE CARDIFF COAL
RUNS AT THE FOOT OF WALDEN'S RIDGE
THE WHOLE LENGTH OF THE TOWNSHIP

TOWN.



CARDIFF, TENN.


ON THE QUEEN & CRESCENT R.R. ROUTE, MAIN LINE
CINCINNATI TO NEW ORLEANS.

Scale of Feet.
0 100 200 300 400 500 600 700 800 900 1000

THE IRON ORE OF THE CARDIFF COAL & IRON CO.
RUNS AT THE FOOT OF WALDEN'S RIDGE THROUGHOUT
THE WHOLE LENGTH OF THE TOWNSHIP.


THIS MAP EMBRACES PARTS OF ROANE, CUMBERLAND AND MORGAN COUNTIES, TENNESSEE.

B CARDIFF COAL & IRON COMPANY



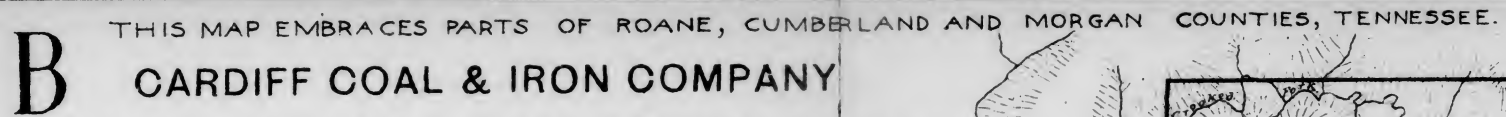

THIS MAP EMBRACES PARTS OF ROANE, CUMBERLAND AND MORGAN COUNTIES, TENNESSEE.

B CARDIFF COAL & IRON COMPANY

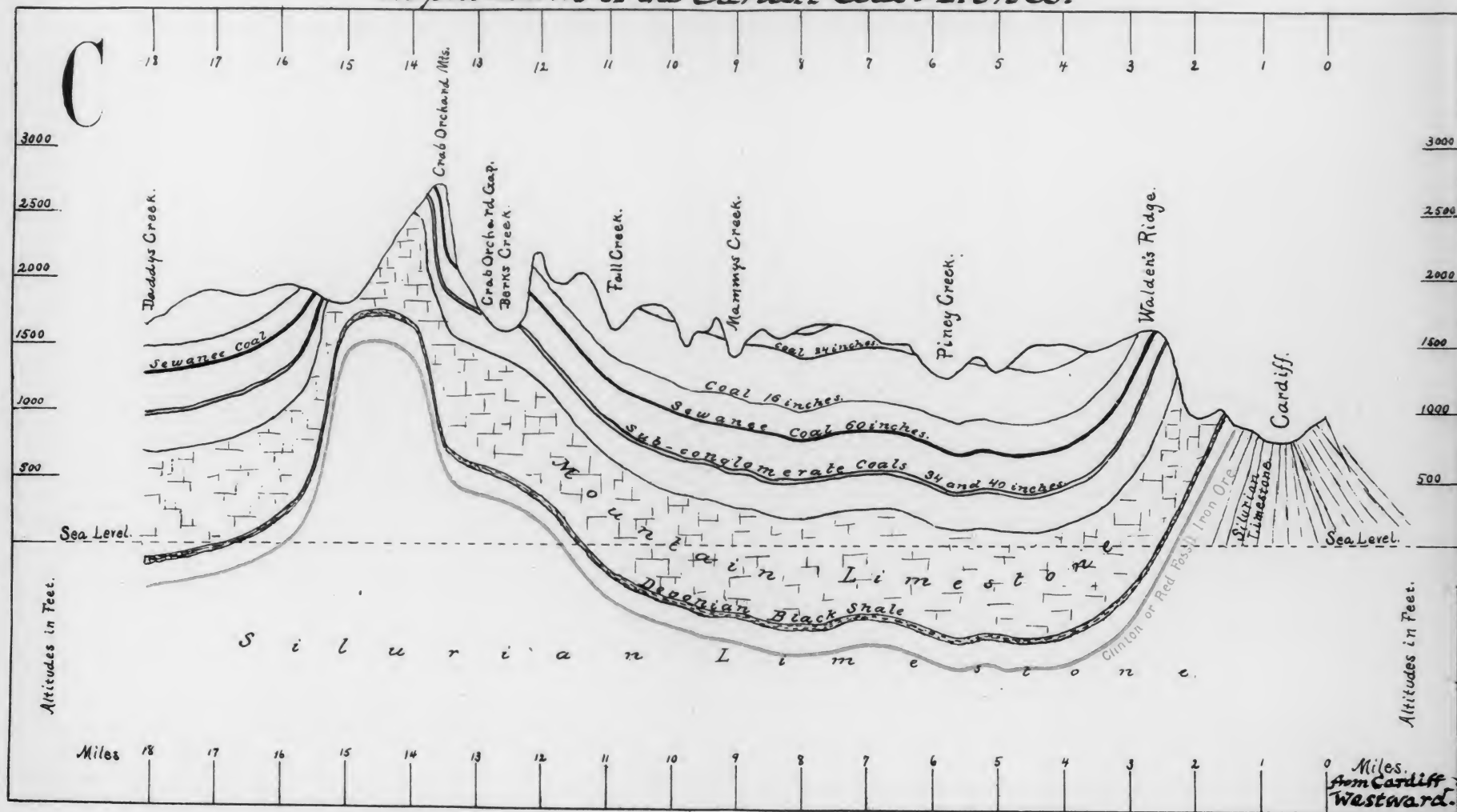


B THIS MAP EMBRACES PARTS OF ROANE, CUMBERLAND AND MORGAN COUNTIES, TENNESSEE.

CARDIFF COAL & IRON COMPANY



Section from Cardiff West,
on possessions of the Cardiff Coal & Iron Co.



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Cardiff coal and iron company.
Cardiff, Tennessee. July 1890.

David A. Friedman

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